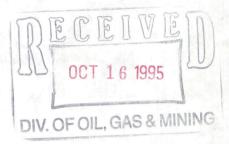
JUMBO MINING COMPANY

6305 Fern Spring Cove Austin, Texas 78730 512-346-4537 (Ph.) 512-346-3188 (Fax)

> October 10, 1995 File: DWQ08075

Mr. Mark Novak Division of Water Quality Department of Environmental Quality 288 North, 1460 West Salt Lake City, Utah 84114-4570

Dear Mr. Novak:



We have concluded our sampling of the perched saturation zone in the vicinity of the heaps previously leached by Western States Minerals Corporation at the Drum Mine, and the samples have been analyzed by American West Laboratory in Salt Lake. Five of the monitoring holes which were drilled by Jumbo after it took over the property, were sampled on June 27th, 1995. The samples were delivered under chain of custody (copy enclosed) to American West on the following day. Sampling procedures and protocol were in accordance with our letter to DWQ dated May 26, 1995. Copies of the results are enclosed.

The recent sampling of the perched saturation zone has shown that all constituents have decreased in concentration since Western stopped leaching the unpermitted leaking heaps in the summer of 1988, pursuant to an order to Western from the DEQ. (See comparison of 1991 samples with the most recent June, 1995 results.) WAD cyanide and metals are all below drinking water standards (DWS) in the most recent samples. Total cyanide was slightly above DWS (0.200 ppm) in monitoring hole No. 34 (0.220 ppm), but was below DWS in all other holes. Chloride, nitrate and total dissolved solids (TDS) remain above DWS, but have decreased in concentration, indicating that these also will be at or near regional levels in the relatively near future.

Regionally, the Busby Spring, the nearest natural water seepage, located approximately 1/2 mile away, was also above DWS in chloride (915 ppm), TDS (2,298 ppm) and nitrate (49 ppm) in our previous sampling. Our water well, located seven miles away, was above DWS in chloride (845 ppm) and relatively high in TDS (1,852 ppm). Nitrate was not determined in the well water in previous samplings.

RECOMMENDATIONS & COMMENTS:

1. We would like to point out, first of all, that this small perched saturation zone does not constitute a source of usable water, and thus does not fit the legal definition of ground water, according to our understanding of the relevant Utah law. There is no known ground water, as

Letter To Mr. Novak/DWQ October 10, 1995

defined in the Utah law, within miles of the subject saturation zone. The Busby Spring is a small seepage located about 100 feet higher in elevation and approximately 1/2 mile away from the site. It is not a source of water suitable for human or industrial consumption. In the immediate vicinity of the mine heaps, drill holes are known to be dry down to elevations of 1,000 feet or more below the subject saturation zone.

Thus, there seems to be no reasonable possibility of contamination of ground water by the relatively insignificant amounts of contaminants that might eventually survive the journey through many miles horizontally and thousands of feet in elevation of desert rock and soils between this source and the nearest known ground water.

- 2. The WAD cyanide, total cyanide (on the average for all of the samples) and metals have all been shown to be below drinking water standards. As indicated above, any degradation of ground water by chlorides or nitrates from this source is highly unlikely.
- 3. The evidence that has been accumulated over the past four years of monitoring demonstrates no need for remediation or further sampling. Accordingly, we request permission to plug and cap the monitoring holes in accordance with standard procedures which apply for exploration drill holes in the area.
- 4. And finally, to the improbable extent that any remediation of past so-called ground water contamination might ever be required, it is important to remember that any such contamination is attributable solely to the mining activities that were conducted by Western States Minerals Corporation prior to the time that Jumbo Mining Company took possession of the Drum Mine.

Notwithstanding any suggestion to the contrary, it is indisputable that Jumbo never assumed any liability for any of Western's groundwater contamination. Indeed, the Colorado District Court decision which we believe to have erroneously thrust upon Jumbo the responsibility for "all reclamation" at the Drum Mine specifically exempted the groundwater issue from its decision and refrained from making any determination as to who between Jumbo and Western would be liable for any such contamination.

It is also important to remember that the Utah Division of Oil, Gas and Minerals is still holding a reclamation bond from Western in the amount of \$264,000 which should be available to the State of Utah to cover any and all reclamation obligations for which Western might ultimately be held accountable, including, without limitation, any preexisting groundwater problems.

In this connection, as you may already be aware, Jumbo has appealed from the above-mentioned Colorado District Court Decision to the Colorado Court of Appeals and expects that a decision will be rendered early in the coming year. Jumbo is confident that at the conclusion of the appellate process, Jumbo's position will be fully vindicated, that its clear contractual entitlements will be restored, and that Western will be held fully and solely responsible for any and all reclamation which is attributable to Western's mining operations at the Drum Mine.

Letter To Mr. Novak/DWQ October 10, 1995

Accordingly, we urge all agencies of the State of Utah, as appropriate, to retain and look to Western's existing bond to satisfy any possible, albeit presently undetermined, liability for the remediation of any condition that may be attributable to Western's mining operations at the Drum Mine, and to do so regardless of the adequacy of the reclamation bonding that Jumbo now has or may hereafter have in place.

Sincerely,

E. B. King

cc: DOGM (Lowell Braxton)

BLM (Rody Cox)
DH (Drum Mine)

ZLS, WEM

COMPARISON OF ANALYTICAL DATA FROM MONITORING HOLES IN THE PERCHED AQUIFER AT THE DRUM MINE

	MH 7 (1991)	MH 7 (1995)	MH 8 (1991)	MH 8 (1995)
As	0.093	0.006	0.015	<0.005
Cd	<0.005	0.008	<0.005	0.004
Cr	0.240	0.020	<0.005	0.020
Pb	0.310	<0.050	<0.100	<0.050
Hg	<0.0002	<0.001	<0.002	<0.001
Chloride	4,600	3,800	3,720	2,600
Total CN	0.170	0.081	0.210	0.170
WAD CN	NA	0.015	NA	0.026
Nitrate	NA	7.000	NA	13.0
TDS	10,622	8,700	9,730	6,700

	MH 17 (1991)	MH 17 (1995)	MH 33 (1991)	MH 33 (1995)
As	0.012	<0.005	0.037	<0.005
Cd	<0.005	<0.004	<0.005	<0.004
Cr	0.020	0.010	0.090	0.010
Pb	0.028	<0.050	<0.100	<0.050
Hg	0.0006	<0.001	<0.0002	<0.001
Chloride	3,080	1,700	2,500	1,400
Total CN	0.210	0.160	0.440	0.150
WAD CN	NA	0.019	NA	0.011
Nitrate	NA	19.0	NA	38.0
TDS	8,196	6,300	7,890	6,500

	MH 34 (1991)	MH 34 (1995)	
As	0.012	<0.005	
Cd	<0.005	<0.004	
Cr	0.030	0.020	
Pb	<0.100	<0.050	
Hg	0.0008	<0.001	
Chloride	2,780	1,700	
Total CN	0.440	0.220	
WAD CN	NA	0.029	
Nitrate	NA	31.0	
TDS	8,296	6,700	

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Concentrations are in mg/l

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INORGANIC ANALYSIS REPORT

Client: Jumbo Mining Date Sampled: June 27, 1995 Lab Sample ID.: 22963-01

Field Sample ID.: Drum Mine/MH-7

Contact: Ed King Date Received: June 28, 1995

Received By: Elona Hayward Set Description: Five Water Samples

Analytical Results

	Analytical Results			
	TOTAL METALS	Method <u>Used;</u>	Detection Limit: mg/L	Amount Detected: mg/L
463 West 3600 South Salt Lake City, Utah	Arsenic	7060	0.005	0.006
84115	Cadmium	6010	0.004	0.008
	Chromium	6010	0.01	0.02
(801) 263-8686 Fax (801) 263-8687	Lead	6010	0.05	<0.05
1-ax (601) 263-8687	Mercury	7471	0.001	<0.001
	OTHER CHEMISTRIES			
	Chloride	4500 CLB	0.5	3,800.
	Cyanide (Total)	335.3	0.005	0.081
	Cyanide (WAD)	335.3	0.005	0.015
	Nitrate (as N)	353.2	0.01	7.0
	TDS	160.1	1.0	8,700.

Released by:



INORGANIC ANALYSIS REPORT

AMERICAN WEST ANALYTICAL **LABORATORIES**

Client: Jumbo Mining Date Sampled: June 27, 1995 Lab Sample ID.: 22963-02

Field Sample ID.: Drum Mine/MH-8

Contact: Ed King

Date Received: June 28, 1995 Received By: Elona Hayward

Set Description: Five Water Samples

Analytical Results

	Analytical Results			
:	TOTAL METALS	Method Used:	Detection Limit: mg/L	Amount Detected: mg/L
	, TOTALINETAES			
i63 West 3600 South Salt Lake City, Utah	Arsenic	7060	0.005	<0.005
84115	Cadmium	6010	0.004	0.004
	Chromium	6010	0.01	0.02
(801) 263-8686	Lead	6010	0.05	<0.05
Fax (801) 263-8687	Mercury	7471	0.001	<0.001
	OTHER CHEMISTRIES			
	Chloride	4500 CLB	0.5	2,600.
	Cyanide (Total)	335.3	0.005	0.17
	Cyanide (WAD)	335.3	0.005	0.026
	Nitrate (as N)	353.2	0.01	13.
	TDS	160.1	1.0	6,700.

Released by:



INORGANIC ANALYSIS REPORT

Client: Jumbo Mining
Date Sampled: June 27

Date Sampled: June 27, 1995 Lab Sample ID.: 22963-03

Field Sample ID.: Drum Mine/MH-17

Contact: Ed King

Date Received: June 28, 1995
Received By: Flora Hayward

Received By: Elona Hayward Set Description: Five Water Samples

Analytical Results

	141017 11001 11001110					
	TOTAL METALS	Method Used:	Detection Limit: mg/L	Amount Detected: mg/L		
463 West 3600 South Salt Lake City, Utah	Arsenic	7060	0.005	<0.005		
84115	Cadmium	6010	0.004	<0.004		
	Chromium	6010	0.01	0.01		
(801) 263-8686 Fax (801) 263-8687	Lead	6010	0.05	<0.05		
7 m (00.) 203-0007	Mercury	7471	0.001	<0.001		
	OTHER CHEMISTRIES	**Assaulted				
	Chloride	4500 CLB	0.5	1,700.		
	Cyanide (Total)	335.3	0.005	0.16		
	Cyanide (WAD)	335.3	0.005	0.019		
	Nitrate (as N)	353.2	0.01	19.		
	TDS	160,1	1.0	6,300.		

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INORGANIC ANALYSIS REPORT

Client: Jumbo Mining
Date Sampled: June 27, 1995
Lab Sample ID.: 22963-04

Field Sample ID.: Drum Mine/MH-33

Contact: Ed King

Date Received: June 28, 1995

Received By: Elona Hayward Set Description: Five Water Samples

Analytical Results

	Analytical Results			
	TOTAL METALS	Method Used:	Detection Limit: mg/L	Amount <u>Detected:</u> mg/L
63 West 3600 South Salt Lake City, Utah	Arsenic	7060	0.005	<0.005
84115	Cadmium	6010	0.004	<0.004
	Chromium	6010	0.01	0.01
(801) 263-8686 Fax (801) 263-8687	Lead	6010	0.05	<0.05
	Mercury	7471	0.001	<0.001
	OTHER CHEMISTRIES	-	•	
	Chloride	4500 CLB	0.5	1,400.
	Cyanide (Total)	335.3	0.005	0.15
	Cyanide (WAD)	335.3	0.005	0.011
	Nitrate (as N)	353.2	0.01	38.
	TDS	160.1	1.0	6,500.

Released by:



INORGANIC ANALYSIS REPORT

Client: Jumbo Mining Date Sampled: June 27, 1995 Lab Sample ID.: 22963-05

Field Sample ID.: Drum Mine/MH-34

Contact: Ed King

Date Received: June 28, 1995
Received By: Elona Hayward
Set Description: Five Water Samples

Analytical Results

	TOTAL METALS	Method Used:	Detection Limit: mg/L	Amount Detected: mg/L
463 West 3600 South Salt Lake City, Utah	Arsenic	7060	0.005	<0.005
84115	Cadmium	6010	0.004	<0.004
	Chromium	6010	0.01	0.02
(801) 263-8686 Fax (801) 263-8687	Lead	6010	0.05	<0.05
1 DA (((() / 20)-800)	Mercury	7471	0.001	<0.001
	OTHER CHEMISTRIES			
	Chloride	4500 CLB	0.5	1,700.
	Cyanide (Total)	335.3	0.005	0.22
	Cyanide (WAD)	335.3	0.005	0.029
	Nitrate (as N)	353.2	0.01	31.
	TDS	160.1	1.0	6,700.

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